

TRANSACTIONS OF THE CHICAGO SURGICAL SOCIETY.

Stated Meeting, April 7, 1902.

ARTHUR D. BEVAN, M.D., in the Chair.

LYMPHOSARCOMA OF THE RECTUM.

DR. WILLIAM HESSERT presented a man upon whom he had operated for sarcoma of the rectum. The patient presented himself to him the beginning of last July, with a history of having had symptoms referable to the rectum for five months before that time. He experienced a steadily increasing sense of fulness in the rectum; pain at times when he sat down, as his occupation, that of a tailor, demanded. He was fifty years of age. There was a slight discharge of blood sometimes, with a gradually increasing sense of weakness, and some loss of weight. Further than that he had no symptoms. Patient thought himself afflicted with hæmorrhoids. General physical examination was practically negative. Digital examination of the rectum encountered a large tumor mass situated about one inch above the anus and springing from the posterior rectal wall. The finger came upon a mass, and, owing to its size, it was impossible to feel the upper pole. One could palpate a smooth, slightly movable body, traversed by a large sulcus, not very tender, and this was all that could be elicited by examination. There was no enlargement of the inguinal glands. The part of the rectum bearing the tumor was removed by a modified Heinecke operation. At the expiration of nine months, the patient is in good condition. The tumor was examined by Dr. M. Herzog, who pronounced it to be a lympho-sarcoma.

DR. DANIEL N. EISENDRATH had never seen a case of sarcoma of the rectum, but had observed several cases of sarcoma of the small intestine. He said Kundrath had called attention

to cases of lymphosarcoma of the alimentary tract. The case reported by Dr. Hessert was interesting in that the disease apparently pursued a more benign course than was the case in many other sarcomas. In a specimen which he saw Kundrath exhibit, the entire stomach was about two inches thick from cardiac to pyloric end, showing the uniform progress of the growth, with adhesion to other viscera, such as would be expected from carcinoma elsewhere.

DR. ALEXANDER HUGH FERGUSON had never seen a case of lymphosarcoma of the rectum, but he had noticed sarcoma of other parts of the alimentary canal. He removed a sarcoma of the cæcum about ten years ago. He thought the case reported by Dr. Hessert showed the comparative benignity of these tumors in the rectum.

DR. L. L. McARTHUR said that the first time one utilized the Kraske incision or modifications thereof, such as had been made by Hochenegg and others, it seemed a rather formidable operation and a crude way to approach the rectum, but it enabled the surgeon to get at the entire rectal tube, and one became more pleased with it except in those cases in which tumors occurred in the female; then the vaginal route could be readily utilized.

During the past week he had removed by a Kraske incision a tumor which involved the posterior wall of the rectum, capable of being reached at its upper limit by strong pressure on the perineum with the finger, involving only about one-half of the circumference of the rectum, and it was quite feasible through the Kraske incision to remove the growth without making total resection of the rectum. He believed that it was the route to be chosen when the growth was situated on the posterior wall, and when it did not require total resection of the rectal wall. From that situation it was far more feasible to reach the involved lymphatics that lay along the mediosacral line than it was by the vaginal route. But in the female, where total resection of the rectal wall was contemplated, then he believed that an incision in the posterior vaginal wall, splitting and laying it back on each side, enabled one to amputate the rectum beneath the growth, to pull it towards the symphysis, get at the entire rectal wall with a hold on it, and with a means of handling it that could not be done by a Kraske. It was hard through the Kraske incision to handle the rectum when it still remained attached to the anus.

In the case he operated on during the week, he made a suture after the Heinecke-Mikulicz method of the long axis of the wound in the bowel, and brought it from above downward, so that no stricture could result.

As to sarcoma of the intestinal tract, he did not recall ever having seen such a case. He had seen one case of supposed sarcoma of the cæcum, but this turned out to be tuberculosis.

DR. ARTHUR DEAN BEVAN said he had found great difficulty in two cases where he made rectoplasty for stricture on the same plan as a Heinecke-Mikulicz pyloroplasty, dividing the stricture longitudinally and uniting it transversely, in getting primary wound healing. He was rather inclined to believe that this was a location where it was difficult to get union in the rectum. These two cases he had ran along very well for six or eight days, with no evidence of suppuration, then later broke down, with formation of a fistula. On the other hand, twice, in making a resection of the rectum, bringing the rectum out entirely through the sphincter and making an end-to-end anastomosis with deep mattress sutures, and then whipping the mucosa together with a fine continuous suture, he had obtained ideal union. This experience led him in this line of work to adopt such a scheme as this rather than a rectoplasty in a similar case. He did not think the method could be applied in the case of Dr. Hessert, unless he first amputated the tumor, then turned the rectum inside out, and this would necessitate using the peritoneum and ligating the mesocæcum. Weir, in a report made about a year ago, found he had obtained in his rectal work much better union by making end-to-end anastomosis after passing the rectum through the sphincter than in any other way.

URANOSTAPHYLORRHAPHY.

DR. ALEXANDER HUGH FERGUSON read a paper on CLEFT PALATE, and exhibited a patient upon whom he had performed a uranostaphylorrhaphy at one sitting, securing good result. For this paper, see the October issue of the ANNALS OF SURGERY.

FIBROSARCOMA OF THE ILIUM.

DR. A. E. HALSTEAD showed a specimen of sarcoma of the ilium which he had removed from a boy, eleven years of age, about one year ago. Microscopical examination showed the tumor

to be a sarcoma. The tumor grew from the ilium close to the sacro-iliac joint of the right side. The tumor compressed the sciatic nerve, and a portion of it projected into the obturator foramen, and pressed upon the obturator nerve, causing symptoms simulating hip disease. Patient was examined a number of times and treated for months for hip disease. He had the characteristic limp of a patient with tuberculosis of the hip. There was atrophy of the muscles, pain in the knee, and slight elevation of temperature. The only feature which argued against hip disease was the absence of rigidity of the hip muscles. On rectal examination the tumor was felt, but could not be palpated until the patient was under an anæsthetic.

The tumor was removed by making a long incision parallel with Poupart's ligament, running back behind the anterior superior spine along the crest of the ilium, turning the peritoneum over and enucleating the tumor extraperitoneally. The iliac vessels were stretched over the tumor, very much enlarged, and it required considerable time to separate the vessels from the tumor without doing damage. The tumor was easily removed. The iliac vessel was pushed towards the inside from the tumor, which was separated from the bone by chisel, taking a layer of the bone with the tumor. The boy made a good recovery, having gained the use of his leg perfectly. The tumor proved to be one of fibrosarcoma growing from the sacro-iliac synchondrosis.

DR. ARTHUR DEAN BEVAN said that he saw Schauta, in Vienna, remove a similar tumor from the ilium and ligate the common iliac artery and vein at the same time, and, very much to his surprise, there was no gangrene following a complete operation. The common iliac artery and vein were so situated that the tumor could not apparently be removed without taking a section of them out. This was done, and no gangrene whatever followed.

ANEURISM OF THE SECOND PART OF THE RIGHT SUBCLAVIAN.

DR. HALSTEAD also reported briefly a case of aneurism in which he ligated the first part of the right subclavian for an aneurism of the second part. It was now two and a half years since the operation was done, and the patient is perfectly well, without any subsequent peripheral gangrene.

VALVE FORMATION IN THE LOWER PORTION OF THE URETER.

DR. WILLIAM E. MORGAN read a paper with the above title, for which see the October issue of the *ANNALS OF SURGERY*.

DR. ALEXANDER HUGH FERGUSON recalled a similar case to the one narrated by Dr. Morgan, where the stricture was due to a stone; but there was also a small stricture at the opening of the ureter into the bladder. This stone was so small that it could not be detected by cystoscopic examination, but with two fingers in the rectum and a sound in the bladder he felt a foreign body there. This case came under his observation before the advent of the X-ray as an aid in such examinations. There was also an enlarged kidney with pus in the urine. Patient had had frequent attacks of pain, hæmaturia, etc. He explored the kidney first through an oblique lumbar incision, and found both the ureter and kidney enlarged. He did not open into either, but went down in the direction of the inguinal canal, or in the direction of the lower fourth of Dr. Morgan's incision, and removed the stone from the ureter at that point. He cut off the ureter at that point and reimplanted it into the bladder with two rows of sutures, and with three or four stitches attached it to the mucous membrane, then inverted the bladder, rolling the whole end of the ureter into the bladder at one sitting. The patient made a good recovery.

He had another case where there was a uretero-abdominal fistula. He went through the right rectal wall and transplanted the fistulous opening which led into the abdominal cavity, with all the cicatricial mass, pushed that into the bladder and sewed it there, with a good result.

One of these patients was a long time under the anæsthetic, between two and three hours. This was a great tax upon the kidneys. He criticised the use of ether in such cases, saying that chloroform ought to be used, as with it there was less tendency to suppression of urine afterwards. This he had demonstrated to his own satisfaction in the last year.

DR. L. L. McARTHUR thought that the incision separating the external oblique muscle, parallel to its fibres in the position shown by the cicatrix, enabled one to reach that portion of the ureter which the essayist had mentioned readily, and that it was unnecessary to make the two wounds communicate. He thought,

therefore, that where the muscles were separated at a distance of three to four inches from end to end, it would enable one to get at all parts of the ureter, leaving a considerable portion of the abdominal wall yet uncut.

DR. ARTHUR DEAN BEVAN said that he had seen one case of death after ligating the common iliac artery, which he felt at that time was largely due to the very extensive stripping up of the peritoneum, so lowering the vitality of the tissue that infection was made more probable, and in handling the peritoneum, as surgeons did so frequently, it seemed to him cutting directly through the peritoneum would make that step of the operation easier and do away with the difficulty, mentioned by Dr. Morgan, of avoiding the peritoneum or tearing into it. He was impressed with the fact that the bulk of this ureteral work, which was done by gynæcologists, had been done through the peritoneum. Most surgeons were agreed now that ligation of the iliac arteries was done best by the transperitoneal route.

DR. MORGAN, in closing the discussion, and in answer to Dr. Bevan, said he had some fear in handling the peritoneum in his case. Not knowing what he was going to find and how much he would have to open the pouch, which had been for several months drained and which had already become infected, he felt all the more fear for the peritoneum; and in anatomical experiments on cadavers which he made a good many years ago, before much of the low ureteral work was done, he continually searched the pelvis to see how much he could do without hurting the peritoneum in this neighborhood, and it occurred to him at that time that almost anything in the nature of operating on the seminal vesicles, the pelvic portion of the spermatic cord, and the bladder, as well as dealing with the pelvis and the lymphatics in the pelvis, could be undertaken extraperitoneally.

DR. DANIEL N. EISENDRATH read a paper entitled "Traumatic Rupture of the Spleen."

DR. WILLIAM E. MORGAN had seen but one case of rupture of the spleen, and this was in a cadaver. There was no history of any injury. The man was a tramp, who was found dead in the woods, with his coat tucked under his head for a pillow. The post-mortem examination revealed an extensive rupture of the spleen, with a great deal of blood and blood-clots in the

general peritoneal cavity. The spleen, however, was much larger than normal, and he thought it might have been an ague spleen.

Two years ago he did a splenectomy for splenomegaly. The spleen was very large. He was unable to obtain a clear and definite history of the case. He thought it was a syphilitic spleen because the patient had improved under the use of iodide of potassium and mercury. In this case, in separating a small adhesion posterior to the spleen from the peritoneum, he encountered the most profuse hæmorrhage he had even seen in any operation. A sterile towel was rapidly grabbed and crowded in between the spleen and peritoneum. He thought this saved the patient's life. The towel was left in for two or three days. He thought this case emphasized the point as to how small an injury of the spleen would produce an enormous amount of hæmorrhage.

DR. ALEXANDER HUGH FERGUSON said that in the spring of 1891, a man, in alighting from a street-car, was run into by another man who was riding a bicycle, the patient being struck by the bicycle over the spleen. He saw him about two hours after the accident occurred. Patient was in shock, without evidence of any external injury. There was no tenderness over the spleen or over any of the other abdominal organs that could be detected. In twenty-four hours a tumor appeared in the region of the spleen. At this time patient rallied from the shock, after having been given strychnine, salt transfusion, and so on, but the tumor increased in size, after which the symptoms of shock reappeared. The symptoms became more and more grave, and it was only within forty-eight hours thereafter that he made up his mind it was a case of rupture of the spleen without rupture of the capsule. He proposed operation, but it was refused. The tumor had increased to such a large extent until it reached to the iliac crest and below the umbilicus, then suddenly ruptured, followed by death of the patient. Two other physicians saw the patient in consultation, and it was only after they had refused to sign a death certificate that a post-mortem examination was permitted. This examination disclosed complete pulpification of the spleen, so that he could not discern which was blood-clot and which was spleen.

DR. THOMAS A. DAVIS said that the great mortality of sub-parietal rupture of a viscus which could be removed with a mortality of less than five per cent. by general splenectomy was appall-

ing at this day in surgery, and it was largely due to errors in diagnosis and to delay in operating. He thought the whole question of injury to the abdominal viscera was involved, particularly in the light of Morris's observations, who had experimented on the kidney and had developed the fact that rupture of the kidney was due to hydraulic pressure. Grawitz and others had experimented upon the kidney in attempting to rupture it by blunt instruments, and were unable to injure the kidney. The speaker himself had made experiments on the cadaver recently. The body was held in the erect position, and with a hammer he attempted to deliver a blow, such as might be given by the kick of a horse, and he was unable to rupture the hollow viscera. He ruptured the colon, but was unable to injure the solid viscera, and he attributed the injury to the colon to the fact that it was under gaseous tension, and had indirect contact with the blow. Grawitz was unable to rupture the kidney from external violence. Morris took the kidney from a cadaver and threw it upon the floor, without being able to injure it, except to produce a slight abrasion of its surface. By injecting the kidney, ligating its vessels, and throwing it upon the floor, he produced multiple fractures. The lines of fracture conformed to the lines found in ruptured kidney during life. These organs, which were so delicate in the frame-work and contained such an amount of blood, were easily fractured by hydraulic force.

The whole question of subparietal injury to the abdominal viscera was involved because of the difficulty of differential diagnosis. A large blunt instrument, applied directly over the spleen, might rupture the liver or the kidney; and how to make a differential diagnosis was exceedingly difficult, if not impossible. The lesson to be learned was that if a patient presented the picture or history of a severe shock, and did not react from the shock, as a patient would who had not received a grave organic injury, an immediate operation should be done for diagnostic purposes.

DR. L. L. McARTHUR said that in his hospital service, four or five years ago, he had the case of an elevator boy who accidentally fell down the elevator shaft, striking on the top of the elevator. He fell one story, striking a cross-bar ledge. The boy was brought to the hospital in shock, with physical signs which led Dr. McArthur to believe that there was fluid in the peritoneum. The history led him to believe that the boy was

having an internal hæmorrhage. He made an incision in the median line, to the side of the umbilicus, and found a large quantity of blood in the abdomen, and traced its source to a lacerated spleen. The capsule was torn and bleeding. He tried to stitch it, and found it impracticable, but with a mechanical tampon, used after the manner of a Mikulicz tampon, he succeeded in checking the hæmorrhage, and the patient recovered. He thought an attempt should be made by pressure at least to stop the hæmorrhage, for a few hours, from the spleen before excising the organ. Hæmorrhages from the liver and from the spleen, in his experience, can be readily stopped unless the laceration extends into the large vessels at the root of the spleen. The towel pressure, mentioned by Dr. Morgan, led him to think that many cases of splenic hæmorrhage could be arrested by mechanical pressure, aided by the calcium chloride solution, moistening the tampon with that, or suprarenal extract in addition to that.

He thought it was wise to explore the abdomen early in cases of suspected injury where profound shock was present, rather than to wait, but he would hesitate about excising a fairly normal spleen unless the hæmorrhage showed no indication of being arrested by compression.

DR. ARTHUR DEAN BEVAN said he had had two cases of rupture of the spleen, both of them having recovered. One was a malarial spleen, the patient having come under his observation in Portland, Oregon. The other case was a spleen which ruptured about six months ago at the Presbyterian Hospital. Neither of these cases was operated on in the sense that the spleen was removed. The first case was seen about a week after the injury. The abdomen was greatly distended with fluid. The fluid was removed through a small incision, a small drain introduced, and the patient recovered.

The second case was referred to him by Dr. Herrick about six months ago. The patient, a Greek, was struck by another Greek with a stone about the size of one's fist, striking the patient in the region of the spleen and producing a contusion. The symptoms were those of shock. A large amount of blood was found in the abdominal cavity. The disappearance of liver dullness led him to believe that there might be a perforation of the alimentary canal. Considering the tympany which was found in the case, he eliminated rupture of the alimentary canal, and

made a diagnosis of rupture of the spleen. The man was given salt solution subcutaneously, pressure was made upon the abdomen, cold compresses applied, strychnine administered, and he went on to recovery with one complication, which was that sapræmia developed from the large amount of blood in the abdominal cavity. A laparotomy was made, the blood washed and drained out, but nothing done with the spleen.

He had gone over the literature of injuries of the spleen, and was not at all convinced that the operative treatment for rupture of the spleen, particularly the removal of this organ, was warranted. The statistics would not lead one to that conclusion.

Dr. Eisendrath had said there were four well-authenticated cases of recovery on record after rupture of the spleen. The speaker thought this hardly represented the facts, according to the report he (Bevan) had given to-night. There was no question about either of the two cases he had mentioned. He thought there were a great many cases of rupture of the spleen which were not reported, and not operated, that had recovered. He was inclined to believe that we could not come to the conclusion that splenectomy should be performed when a diagnosis was made of rupture of the spleen any more than that an immediate operation should be done following a diagnosis of perforating bullet wound of the stomach. Many of the cases of rupture of the spleen, when seen, were in such condition that a laparotomy would mean death. On the other hand, many of them recovered without operation for the removal of the spleen. Furthermore, splenectomy was by no means a minor operative procedure. The operation itself produced a great deal of shock.

He thought Dr. Morgan's case, and a number of similar cases, showed how readily bleeding could be controlled by pressure.

DR. EISENDRATH, in closing the discussion, and in reply to the remarks of Dr. Bevan, said that when he approached this case the thought had entered his mind to which Dr. Bevan referred, namely, would the boy live if let alone, and took his chances of absorption of the blood? He recalled one case which entered St. Thomas's Hospital five days after the injury, the patient having been run over by a hansom cab. He recovered from the immediate effects of the injury, then suddenly went into collapse, and died.

As regards splenectomy, a good deal depended upon the extent and position of the tear. If the tear involved the hilus, so that the vessels were torn close to the entrance into the spleen, the surgeon could not do much but splenectomy. If the tear was on the upper or lower pole, tampon would be indicated. The only reason he did not try tampon was because of the boy's bad condition, and he adopted the quickest procedure. He removed the spleen in a minute or two without any difficulty. In his paper he had tried to confine himself as much as possible to traumatic injury of the spleen where this organ had been previously normal.